

REMARKS

The applicant has amended claim 91 to be dependent upon claim 7, instead of cancelled claim 71. Claims 1, 3-18, 20-28, 30-39, 41-48, 50-65, 82-85, 87, and 89 were rejected as being obvious under 35 USC 103 (a) over USPN 5,558,806 ("Policello") and USPN 5,078,782 ("Nielson"). Claim 91 is rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant respectfully traverses these rejections.

112 Rejection of Claim 91

Claim 91 is rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicant appreciates the Examiner pointing out that claim 91 was dependent upon a cancelled claim. The applicant has amended claim 91 to be dependent upon claim 7. For the above reasons, this rejection should be withdrawn.

103 Rejection

Claims 1, 3-18, 20-28, 30-39, 41-48, 50-65, 82-85, 87, and 89 were rejected as being obvious under 35 USC 103 (a) over Policello and Nielson.

The applicant's claim 1 reads:

A herbicide composition consisting essentially of components:

(a) at least one chlorinated carboxylic acid herbicide in the acid form wherein said chlorinated carboxylic acid herbicide is:

(list of herbicides)

(b) at least one surfactant in an effective amount such that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant and wherein said at least one surfactant is selected from the group consisting of:

(List of surfactants)
and optionally

(c) an ester of (2,4-dichlorophenoxy)acetic acid, and said at least one surfactant component (b) is present in a quantity equal to or greater than at least one chlorinated carboxylic acid herbicide component (a).

The key features of the applicant's claimed invention are

1. A chlorinated carboxylic acid herbicide in the acid form.
2. A surfactant such that the chlorinated carboxylic acid herbicide is **fully dissolved in the surfactant**.

None of these features are present in Policello. Neither Policello nor Nielson would lead one skilled in the art to even investigate the solubility of the herbicide in the surfactant (regardless of the form of the herbicide). Neither Policello nor Nielson would lead one of ordinary skill in the art to investigate the use of the acid form of the phenoxy herbicides. Below is a table referring to the sections cited by the Examiner for Policello along with the applicant's comment about the particular section.

US 5,558,806- Policello

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| Abstract | The abstract discloses the use of a surfactant blend and it's use as an adjuvant for pesticide formulations. The abstract provides no disclosure of phenoxy herbicides in any form. Nor does the abstract provide any indication that the claimed surfactant blend fully solubolizes anything, let alone that said chlorinated carboxylic acid herbicide is fully dissolved in the surfactant as is required by the applicant's claimed invention. |
| Col. 2, line 21 - col. 4, line 27 | This section more fully describes the surfactant blend of the invention. The surfactants include a specific silicone surfactant and a second surfactant. The second surfactant is either an alcohol alkoxylate surfactant or an alkyl polyglucoside surfactant. This section provides no disclosure of phenoxy herbicides in any form. Nor does this section provide any indication that the claimed surfactant blend fully solubolizes anything. |

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| Col. 6, lines 26- 42 | This section discloses the pesticides for which the invention is useful. <u>Note that the usefulness of the surfactant blend is determined by the spreading of the foliarly applied pesticide spray (see Column 6, lines 18 – 24.</u> This section provide no indication that the claimed surfactant blend fully solubolizes anything. The surfactant blend is simply used as a spreader for foliar sprays of the listed pesticides. |
| Col. 9, line 52 - col. 10, line 2 | This section simply describes additional and optional components of the invention. |
| Example 4 | This example provides no disclosure of phenoxy herbicides in any form. Nor does this example provide any indication that the claimed surfactant blend fully solubolizes anything. |
| Col. 9, lines 19- 23 and 32- 36 | This section describes the inclusion of the claimed surfactant blend into general pesticide formulations and their further dilution with water. This section provides no disclosure of phenoxy herbicides in any form. Nor does this section provide any indication that the claimed surfactant blend fully solubolizes anything. |
| Discussion of the patent examples | <p>Examples 1 – 4 disclose the spreading characteristics of the claimed surfactant blends. These solutions do not contain any pesticide or herbicide. It appears that Example 2 is missing.</p> <p>Example 5 Employs the surfactant blend used as an additive for the separate pesticide formulation known as Reflex. The attached label for the product Reflex shows clearly that the active ingredient <i>fomasafen</i> is in the <u>sodium salt form</u>. However, referencing back to the large laundry list of pesticides which the inventor claims, (See Column 8, lines 38 – 41), fomasafen is listed simply as fomasafen. In this laundry list, the inventor clearly did not see the need to describe esters and salts of the actives because those would be obvious to one skilled in the art. This example provides no indication that the claimed surfactant blend fully solubolizes anything.</p> <p>Example 6 discloses compositions containing the claimed silicone surfactant blend and a mineral oil. Again, the purpose of the surfactant blend is to provide spreading. These compositions do not contain any pesticide or herbicide.</p> |

Policello at col. 2, lines 2-11, defines the intended scope of the invention as:

“....provides for the acceptable **dispersion**, of pesticide actives without significantly interfering with the spreading capability.....”

And

“....can more effectively **emulsify** water-insoluble agricultural products.”
(emphasis added)

Policello teaches away from the applicant's claimed invention because Policello is trying to emulsify the water-insoluble (salt) agricultural products while the applicant is fully dissolving the acid herbicide in the surfactant. For this reason alone, the applicant believes Policello is not prior art. There is no mention or anticipation of the solubilizing of pesticide actives.

The Examiner recognizes that Policello does not disclose an ester of 2,4-D and an aromatic solvent. However, as stated above, Policello also does not disclose the two key features of the applicant's claimed invention are

1. A chlorinated carboxylic acid herbicide in the acid form.
2. A surfactant such that the chlorinated carboxylic acid herbicide is **fully dissolved in the surfactant**.

The Examiner has relied upon Nielson for showing an ester of 2,3-D and an aromatic solvent. However, Nielson also does not disclose the key features of the applicant's claimed invention “a surfactant such that the chlorinated carboxylic acid herbicide is **fully dissolved in the surfactant**”.

Below is a table referring to the sections cited by the Examiner Nielson along with the applicant's comment about the particular section.

5,078,782- Nielson

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| Col. 12, lines 14-22 | <p>This section describes phenoxy herbicides (<u>sometimes in their acid form</u>) that are useful in the present invention. The herbicides described in this invention are suspended not fully solubolized in these formulations. (See column 9, lines 53 - 54). However, the compositions disclosed in this patent may also contain herbicides that may be partially dissolved in the "oily component" (a mineral oil as disclosed in Column 10, lines 32 - 37). But the description of the compositions in Column 10, lines 60 - 62 clearly indicate that some of the herbicide actives are in the solid form and thus not fully solubolized in the oily component.</p> <p>Nowhere does this section describe the use of surfactants to solubolize anything. For this reason alone, Nielson actually teaches away from the applicant's claimed invention.</p> |
| Col. 10, lines 7-30 | <p>This section describes the "oily component" of the claimed compositions. This oily component is disclosed as the group consisting of petroleum fractions (hydrocarbons), vegetable oils, and esters of monoalcohols or of dihydric, trihydric or other lower (e.g. 4-6 hydroxy functions) polyalcohols, and esters of mono-, di- and polycarboxylic acids, and mixtures thereof.</p> <p>This section provides no disclosure of phenoxy herbicides in any form. Nor does this section provide any indication that the claimed surfactant blend fully solubolizes anything.</p> |
| Col. 8, lines 3-27 | <p>This section contains a description of the surfactants used in the present invention. However, this section provides no disclosure of phenoxy herbicides in any form. Nor does this section provide any indication that the claimed surfactant blend fully solubolizes anything.</p> |
| Discussion of the patent examples | <p>Example compositions disclosed in examples 1 - 4 contain phenmedipham and metamitron as active ingredients. These compositions do not contain any phenoxy herbicides.</p> <p>Example compositions disclosed in examples 5 - 8 contain phenmedipham as the active ingredient. These compositions do not contain any phenoxy herbicides.</p> <p>Example compositions disclosed in examples 9 - 10 contain phenmedipham and chloridazon as active ingredients. These compositions do not contain any</p> |

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| | <p>phenoxy herbicides.</p> <p>Example compositions disclosed in example 11 contains phenmedipham as the active ingredient. These compositions do not contain any phenoxy herbicides.</p> <p>Example compositions disclosed in examples 12 - 14 contain maneb as the active ingredient. These compositions do not contain any phenoxy herbicides.</p> <p>Example compositions disclosed in examples 15 - 18 contain glyphosate as the active ingredient. These compositions do not contain any phenoxy herbicides.</p> <p>Example compositions disclosed in example 19 contains phenmedipham as the active ingredient. These compositions do not contain any phenoxy herbicides.</p> |
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In summary, both Policello and Nielson teach away from a surfactant such that the chlorinated carboxylic acid herbicide is **fully dissolved in the surfactant.** As stated above, both references Policello and Nielson teach away from this feature. Neither reference recognizes the importance of having the two key features of the applicant's claimed invention which are

1. A chlorinated carboxylic acid herbicide in the acid form.
3. A surfactant such that the chlorinated carboxylic acid herbicide is **fully dissolved in the surfactant.**

For the above reasons, this rejection should be withdrawn. In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 00306-00142-USU from which the undersigned is authorized to draw.

Dated: November 6, 2007

Respectfully submitted,

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